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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,643	02/10/2004	Donald A. Cronin	4541-009	1297
24112 7590 04/28/2008 COATS & BENNETT, PLLC 1400 Crescent Green, Suite 300 Cary, NC 27518				
EXAMINER				
SENSENG, SHAUN D				
ART UNIT		PAPER NUMBER		
4176				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/775,643

Applicant(s)

CRONIN ET AL.

Examiner

Shaun Sensenig

Art Unit

4176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____
- Paper No(s)/Mail Date ____

DETAILED ACTION***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 28. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 1-30 are objected to because of the following informalities: It appears that "and" (claim 1, line 5) was intended to be --and--; that "criteria" (claim 2, line 2; claim 3, line 2; claim 4, twice on line 1; claim 14, once on line 5, twice on line 7, and once on line 8; claim 23, line 9; claim 26, line 2; claim 28, line 5; and, claim 29, once on line 2 and twice on line 3) was intended to be --criterion--; and, that "to" (claim 29, line 1) was intended to be --to--, which changes will be assumed for purposes of further consideration of the claims, hereinbelow. Appropriate correction is required.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. To be considered statutory, claimed subject matter requires four things:

(1) the claimed subject matter *must* lie within the ambit of the *four classes* of statutory subject matter enumerated in 35 U.S.C. 101, those being any new and useful *process, machine, manufacture, or composition of matter*;

(2) the claimed subject matter *must not* fall within any of the *three categories* of statutory subject matter *exceptions* enumerated by the courts, those being, *in the absence of any practical application: abstract ideas, laws of nature, and natural phenomena*;

(3) any *practical application* of one of the three *otherwise nonstatutory* categories of exceptions *must not preempt* the underlying abstract ideas, laws of nature, or natural phenomena by foreclosing others from *substantially all other practical applications* of the *same* abstract ideas, laws of nature, or natural phenomena; *and*,

(4) any *practical application* of one of the three *otherwise nonstatutory* categories of exceptions *must* be evidenced in at least one of two possible ways:

(a) by transforming an article or physical object to a different state or thing; or,

(b) by otherwise producing any useful, concrete, and tangible result.

See MPEP §2106(IV).

5. Claims 1-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-30 fail to satisfy the fourth, and thus the second, requirements for statutory subject matter eligibility because they are considered to be drawn merely to the production and/or manipulation of non-functional descriptive material, effecting no "useful, concrete, and tangible result." It has been held that such claims, even if the non-functional descriptive material is claimed in combination with a computer-readable medium, are considered to comprise non-statutory subject matter, for merely manipulating an abstract idea. *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994).

Moreover, claims 1-30 fail to satisfy the third requirement for statutory subject matter eligibility because they are considered to *preempt* the underlying abstract idea, since they would foreclose others from *substantially all practical applications* of the *same* abstract idea. It has been held that such claims are considered to be unpatentable for comprising non-statutory subject matter. *In re Schrader*, 22 F.3d 290, 295; 30 USPQ2d 1455, 1459 (Fed. Cir. 1994).

6. Claim 30 is rejected under 35 U.S.C. 101 because the claim is considered a hybrid claim. See MPEP §2173.05(p) II. If Applicants overcome the related 35 U.S.C. §112 2nd paragraph rejection below, this particular 35 U.S.C. §101 rejection will be withdrawn.

Claim Rejections - 35 USC § 112, Second Paragraph

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 28-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 recites the limitation “the e-business system” in line 7. There is insufficient antecedent basis for this limitation in the claim.

9. Claim 30 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 30 is deemed indefinite because the claim is considered a hybrid claim. See MPEP §2173.05(p) II. In particular, the claim is directed to neither a “process” nor a “machine” but rather embraces or overlaps two different classes of the statutory classes of invention set forth in 35 U.S.C §101.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-30 rejected under 35 U.S.C. 102(b) as being anticipated by Arsanjani's "Service Provider: A Domain Pattern and its Business Framework Implementation" (hereafter referred to as Arsanjani). Arsanjani discloses:

(1) A method of designing and building an e-business system comprising: identifying one or more domains, each said domain comprising one or more patterns having domain specific information; generating an intermediate set of patterns having selected patterns from said one or more domains; and combining patterns in said intermediate set of patterns to produce a multi-domain pattern, said multi-domain pattern defining components of said e-business system. (page 1 and page 6)

(2) A method of designing and building an e-business system wherein said selected patterns are selected according to a first criteria. (page 1 and page 6)

(3) A method of designing and building an e-business system further comprising progressively refining said intermediate set of patterns according to a second criteria.

(4) A method of designing and building an e-business system wherein said second criteria is narrower than said first criteria. (page 1 and page 6)

(5) A method of designing and building an e-business system wherein one of said domains comprises a security domain. (page 1 and page 6)

(6) A method of designing and building an e-business system wherein one of said domains comprises a functional domain. (page 1 and page 6)

(7) A method of designing and building an e-business system wherein one of said domains comprises a performance domain. (page 1 and page 6)

(8) A method of designing and building an e-business system wherein said one or more patterns having domain specific information comprise business security patterns.

(9) A method of designing and building an e-business system wherein said one or more patterns having domain specific information comprise eBusiness patterns. (page 1 and page 6)

(10) A method of designing and building an e-business system further comprising storing said intermediate set of patterns in a database. (page 1 and page 6)

(11) A method of designing and building an e-business system further comprising

implementing said e-business system according to said multi-domain pattern. (page 1 and page 6)

(12) A method of designing and building an e-business system wherein said multi-domain pattern defines one or more hardware components in said e-business system. (page 1 and page 6)

(13) A method of designing and building an e-business system wherein said multi-domain pattern defines one or more software components in said e-business system. (page 1 and page 6)

(14) A method of designing and building an e-business system comprising: identifying a plurality of domains, each said domain comprising one or more patterns having domain specific information; selecting a first set of patterns from one or more said domains based on a first criteria; selecting a second set of patterns from said first set of patterns based on a second criteria, said second criteria being narrower in scope than said first criteria; and generating a multi-domain pattern based on said second set of patterns, said multi-domain pattern defining components of said e-business system. (page 1 and page 6)

(15) A method of designing and building an e-business system wherein one of said first and second criteria comprises criteria representative of a customer's requirements. (page 1 and page 6)

(16) A method of designing and building an e-business system wherein one of said first and second criteria comprises criteria representative of industry regulations.

(page 1 and page 6)

(17) A method of designing and building an e-business system comprising storing said first and second criteria in a database. (page 1 and page 6)

(18) A method of designing and building an e-business system further comprising storing said first and second sets of patterns in said database after said first and second sets of patterns are selected. (page 1 and page 6)

(19) A method of designing and building an e-business system wherein selecting a first set of patterns from one or more said domains comprises displaying potential conflicts between said patterns in said first set of patterns. (page 1 and page 6)

(20) A method of designing and building an e-business system wherein generating said multi-domain pattern comprises combining said second set of patterns. (page 1 and page 6)

(21) A method of designing and building an e-business system wherein combining said second set of patterns comprises associating components of said second set of patterns in a file stored in a database. (page 1 and page 6)

(22) A method of designing and building an e-business system further comprising implementing said e-business system according to said multi-domain pattern. (page 1 and page 6)

(23) A system for designing and building an e-business system comprising: a server; a database communicatively linked to said server; and a controller communicatively linked to said server and said database, said controller adapted to:

display one or more domains to a user, wherein each said domain includes one or more patterns having domain specific information; generate an intermediate set of patterns having selected patterns from said one or more domains according to a predetermined criteria; and combine patterns in said intermediate set of patterns to produce a multi-domain pattern that defines components of the e-business system. (page 1 and page 6)

(24) A system for designing and building an e-business system further comprising a workstation communicatively linked to said server and said database. (page 1 and page 6)

(25) A system for designing and building an e-business system wherein said controller is further adapted to display potential conflicts between said selected patterns. (page 1 and page 6)

(26) A system for designing and building an e-business system wherein said controller is further adapted to store said predetermined criteria in said database. (page 1 and page 6)

(27) A system for designing and building an e-business system wherein said controller is further adapted to store said intermediate set of patterns in said database. (page 1 and page 6)

(28) A controller configured to: display one or more domains to a user, wherein each said domain includes one or more patterns having domain specific information; generate an intermediate set of patterns having selected patterns from said one or more

domains according to a first criteria; and combine patterns in said intermediate set of patterns to produce a multi-domain pattern that defines components of the e-business system. (page 1 and page 6)

(29) A controller configured wherein said controller is further adapted to progressively refine said intermediate set of patterns according to a second criteria, said second criteria being narrower than said first criteria. (page 1 and page 6)

(30) A controller configured further comprising implementing said e-business system according to said multi-domain pattern. (page 1 and page 6)

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thomas (US 6,490,719), Plaisted et al. (US 7,080,089), and Ali Arsanjani's "Principles of Advanced Software Engineering: Variation-oriented Analysis, Design and Implementation."

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun Sensenig whose telephone number is (571) 270-5393. The examiner can normally be reached on Monday to Thursday 7:30 to 5:00 ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry O'Connor can be reached on (571) 272-6787. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S. S./
Examiner, Art Unit 4176
April 23, 2008

/Gerald J. O'Connor/
Supervisory Patent Examiner
Group Art Unit 4176